

WE CLAIM:

1. A dusting device comprising:

- a housing;
 - at least one powder gas delivery device which discharges a powder gas jet onto a surface of products moved in one conveyor direction; and
 - a suction device for unused powder gas, whereby at least one housing wall is permeable for an airstream;
- in which at least one permeable housing wall has an air-permeable filter mat arrangement.

2. A dusting device according to claim 1, in which the airstream is moved by means of at least one fan through the filter mat arrangement.

3. A dusting device according to claim 1, in which several fans are arranged transversally to the conveying direction of the products.

4. A dusting device according to claim 1, in which the airstream flows mainly parallel to the powder gas jet.

5. A dusting device according to claim 1, in which the air-permeable filter mat arrangement is held by a mat holder formed as a grid.

6. A dusting device according to claim 1, in which the air-permeable filter mat arrangement can be replaced.

7. A dusting device according to claim 1, in which the filter mat arrangement has a number of filter mats arranged directly next to each other.

8. A dusting device according to claim 1, in which the filter mat arrangement consists of a polyester material.

9. A dusting device according to claim 8, in which the filter mat arrangement has a material thickness of 10-30 mm.

10. A dusting device according to claim 9, in which the filter mat arrangement has a thickness of 15-20 mm.

11. A dusting device according to claim 8, in which the filter mat arrangement has a weight per m² of 150-200g.

12. A dusting device according to claim 11, in which the filter mat arrangement has a weight per m² of 180g.

13. A dusting device according to claim 8, in which the filter mat arrangement has an initial pressure differential of 25-45 Pa.

14. A dusting device according to claim 13, in which the filter mat arrangement has an initial pressure differential of 30-40 Pa.

15. A dusting device according to claim 13, in which the filter mat arrangement has an initial pressure differential of 33 Pa.

16. A dusting device according to claim 1, in which an upper and at least two lateral housing walls in each case have a filter mat arrangement.

17. A dusting device according to claim 1, in which the housing walls having a filter mat arrangement are surrounded by an air chamber.

18. A dusting device according to claim 1, in which two suction devices for unused powder gas are arranged on the lower end of two housing walls transversal to the product conveyor direction.

19. A dusting device according to claim 1, in which the suction device has at least one powder trapping wall which lies in the extension of a non air permeable housing wall.

20. A dusting device according to claim 1, in which the suction device has a suction aperture, which is adjustable with a slide.

21. A dusting device according to claim 1, in which at least one airfilter is arranged in series to the fans.

Patent 554554